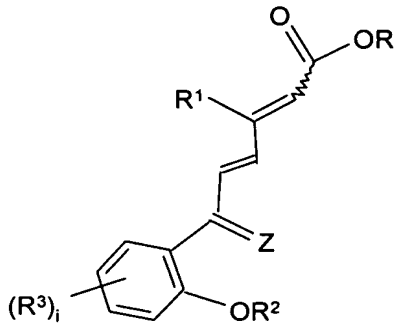
CLAIMS

1- Compound of the formula I :



in which

R^1 represents an optionally substituted saturated aliphatic hydrocarbon-based group; an optionally substituted saturated and/or aromatic carbocyclic group; an optionally substituted saturated and/or aromatic heterocyclic group;

R^2 represents an optionally halogenated saturated aliphatic hydrocarbon-based group; an optionally substituted saturated and/or aromatic carbocyclic group; a saturated aliphatic hydrocarbon-based group which is substituted by an optionally substituted aromatic carbocyclic group; or a saturated aliphatic hydrocarbon-based group which is substituted by a saturated and/or aromatic heterocyclic group;

the radicals R^3 represent, independently of each other, a saturated aliphatic hydrocarbon-based group, which is optionally halogenated and/or optionally interrupted by one or more O or S atoms; a halogen atom; a nitro group; cyano; a (C_6-C_{10})aryloxy group, which is optionally substituted by one or more radicals G°; a (C_6-C_{10})arylthio group, which is optionally substituted by one or more radicals G°; (C_1-C_{10})alkylsulfonyl; (C_6-C_{10})arylsulfonyl, in which aryl is optionally substituted by one or more radicals G°; 5- to 7-membered heteroaryl which comprises one or more hetero atoms chosen from O, N and S and is optionally substituted by one or more radicals G°; (C_6-C_{10})aryloxycarbonyl; (C_6-C_{10})arylcarbonylamino; (C_1-C_{10})alkoxycarbonyl; (C_1-C_{10})alkylcarbonylamino; di(C_1-C_{10})-alkylamino; (C_6-C_{10})aryl(C_1-C_{10})alkyl, in which aryl is optionally substituted by one or more radicals G°; (C_6-C_{10})aryl, which is optionally substituted by one or

more radicals G°; (C_1-C_{10})alkylcarbonyl; or (C_3-C_8)cycloalkyl(C_1-C_{10})alkyl, in which cycloalkyl is optionally substituted by one or more radicals G°;

G° is chosen from halogen; optionally halogenated alkoxy; or optionally halogenated alkyl;

R represents a hydrogen atom; a saturated aliphatic hydrocarbon-based group; an amino group, which is optionally substituted by one or two saturated aliphatic hydrocarbon-based groups; or an optionally substituted aromatic carbocyclic group;

Z represents O; CHR^4 in which R^4 takes any of the meanings given above for R;

i represents the integer 0, 1, 2, 3 or 4,

and also the pharmaceutically acceptable salts thereof.

2- Compound according to Claim 1 of the formula I in which R represents H or (C_1-C_{10})alkyl; R^1 represents optionally halogenated (C_1-C_{10})alkyl or optionally substituted (C_6-C_{10})aryl; R^2 represents optionally halogenated (C_1-C_{10})alkyl; R^3 represents optionally halogenated (C_1-C_{10})alkyl; optionally halogenated (C_1-C_{10})-alkoxy; or a halogen atom;

Z represents O or CHR^4 in which R^4 is H or (C_1-C_{10})alkyl.

3- Compound according to either of Claims 1 and 2 of the formula I in which R^1 represents $-CH_3$ or -phenyl.

4- Compound according to any one of Claims 1 to 3 of the formula I in which Z represents O.

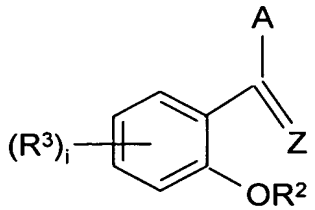
5- Compound according to any one of Claims 1 to 4 of the formula I in which i = 1 and R^3 located in position 5 of the phenyl nucleus represents (C_1-C_6)alkyl; (C_1-C_6)alkoxy; or a halogen atom.

6- Compound according to any one of Claims 1 to 5 of the formula I in which R^2 represents $(C_1\text{-}C_6)$alkyl.

7- Compound according to Claim 1 of the formula I chosen from the following compounds:

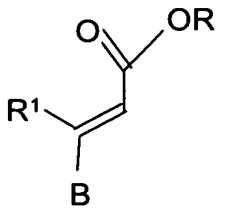
- (E,E)-6-(2,5-dimethoxyphenyl)-6-oxo-3-methylhexa-2,4-dienoic acid;
- ethyl (E,E)-6-(2-methoxy-5-ethylphenyl)-6-oxo-3-methylhexa-2,4-dienoate;
- (E,E)-6-(2-methoxy-5-ethylphenyl)-6-oxo-3-methylhexa-2,4-dienoic acid;
- ethyl (E,E)-6-(2-methoxy-5-chlorophenyl)-6-oxo-3-methylhexa-2,4-dienoate;
- (E,E)-6-(2-methoxy-5-chlorophenyl)-6-oxo-3-methylhexa-2,4-dienoic acid;
- (E,E)-6-(2,5-dimethoxyphenyl)-6-oxo-3-phenylhexa-2,4-dienoic acid;
- ethyl (E,E)-6-(2,5-dimethoxyphenyl)-6-oxo-3-methylhexa-2,4-dienoate;
- ethyl (E,E)-6-(2-benzyloxy-5-methoxyphenyl)-6-oxo-3-methylhexa-2,4-dieonate;
- ethyl (E,E)-6-(2,5-dimethoxyphenyl)-6-oxo-3-propylhexa-2,4-dionate;
- (E,E)-6-(2,5-dimethoxyphenyl)-6-oxo-3-propylhexa-2,4-dienoic acid;
- (E,E)-6-(2-hydroxy-5-methoxyphenyl)-6-oxo-3-methylhexa-2,4-dienoic acid;
- ethyl 6-(2-isobutoxy-5-methoxyphenyl)-6-oxo-3-methylhexa-2,4-dienoate; and
- 6-(2-isobutoxy-5-methoxyphenyl)-6-oxo-3-methylhexa-2,4-dienoic acid.

8- Process for the preparation of a compound of the formula I according to any one of Claims 1 to 7, which comprises the reaction of a compound of the formula II:



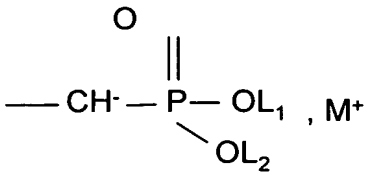
II

in which i, R^3, R^2 and Z are as defined above for formula I in Claim 1, with a compound of the formula III:



III

in which R^1 and R are as defined, except that R does not represent a hydrogen atom for formula I in Claim 1, and either A or B represents -CHO, the other representing:



in which L_1 and L_2 are $(C_1\text{-}C_6)$alkyl and M+ represents a monovalent cation.

9- Pharmaceutical composition comprising one or more compounds of the formula I according to any one of Claims 1 to 7, in combination with one or more pharmaceutically acceptable excipients.

10- Use of a compound according to any one of Claims 1 to 7, for the preparation of a pharmaceutical composition that can be used for the treatment and prevention of dyslipidaemia, atherosclerosis and diabetes.